

The following pages are the LABOR CATEGORIES AND THEIR DESCRIPTIONS from Section J, Attachment B

## **ATTACHMENT B**

### **DSETS PERSONNEL QUALIFICATIONS**

**This enclosure specifies the minimum qualifications for personnel required by this contract. (Note: Two additional years of general experience and two additional years of specialized experience may be substituted for the degree requirements.)**

- 1. Program Manager        (Key Personnel)**
- 2. Senior Computer Systems Analyst**
- 3. Computer Systems Analyst**
- 4. Junior Computer Systems Analyst**
- 5. Applications Programmer**
- 6. System Programmer**
- 7. Senior Functional Analyst**
- 8. Functional Analyst**
- 9. Junior Functional Analyst**
- 10. Quality Assurance Manager    (Key Personnel)**
- 11. Quality Assurance Analyst**
- 12. Data Base Manager**
- 13. Data Base Management Specialist**
- 14. System Administrator**
- 15. Systems Operator**
- 16. Senior Systems Engineer**
- 17. Systems Engineer**
- 18. Senior Software Engineer**
- 19. Software Engineer**
- 20. Senior Training Specialist**
- 21. Training Specialist**
- 22. Hardware Specialist**
- 23. Communications Hardware Specialist**
- 24. Communications Software Specialist**
- 25. Communications Network Specialist**
- 26. Data Entry Clerk**
- 27. Operations Manager**
- 28. Communications Network Manager**
- 29. Senior Project Control Specialist    (Key Personnel)**
- 30. Documentation Specialist**
- 31. Technical Writer/Editor**
- 32. Senior Data Standardization Specialist**

33. Data Standardization Specialist
34. Principal Information Engineer (Key Personnel)
35. Senior Information Engineer (Key Personnel)
36. Information Engineer
37. Principal Open Systems Engineer (Key Personnel)
38. Senior Open Systems Engineer
39. Open Systems Engineer
40. Senior Computer Systems Security
41. Computer Systems Security Specialist
42. Graphics Specialist
43. Junior Systems Engineer
44. Junior Software Engineer
45. Student System Engineering
46. Senior Hardware Installation Technician
47. Hardware Installation Technician
48. Hardware Draftsman
49. Program Administration Specialist (Key Personnel)
50. Project Manager (Key Personnel)
51. Principal Systems Architect
52. Senior Systems Architect
53. Senior Application Engineer
54. Applications Engineer
55. Senior Data Base Management Specialist (Key Personnel)
56. Acquisition Specialist
57. Contract Specialist
58. Marketing Specialist
59. Senior Network Installation Technician
60. Network Installation Technician
61. Network Draftsman
62. Communications Specialist
63. Principal Business Process Reengineering Specialist (Key Personnel)
64. Sr. Business Process Reengineering Specialist
65. Cost Analyst
66. Senior Business Planning and Management Specialist
67. Senior Performance Measurement Specialist
68. Senior Organizational Development Specialist
69. Senior Training Needs Analyst
70. Training Needs Analyst
71. Statistician
72. Audio Visual Expert
73. Multi Media Specialist
74. Senior Applications/Computer Systems Test Manager
75. Clerical Assistant



**1. Program Manager (Key Personnel)**

**ADP-I**

**A. Duties.** Serves as the contractor's contract manager, and shall be the contractor's authorized interface with the Government Contracting Officer (CO), the Contracting Officer's Representative (COR), government management personnel and customer agency representatives. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel and communicating policies, purposes, and goals of the organization to subordinates. Shall be responsible for the overall contract performance and shall not serve in any other capacity under this contract.

**B. Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of ten years experience, of which at least six years must be specialized. Specialized experience includes: complete engineering project development from inception to deployment, proven expertise in the management and control of funds and resources, demonstrated capability in managing multi-task contracts of this type and complexity. General experience includes increasing responsibilities in information systems design and management.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. (in the fields described in this paragraph) will be considered equivalent to two years specialized experience and three years general experience.

**2. Senior Computer Systems Analyst**

**ADP-III**

**Duties.** Provides technical and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and to user standards, and for progress in accordance with schedules. Coordinates with the Program Manager to ensure problem solution and user satisfaction. Makes recommendations, if needed, for approval of major systems installations. Prepares milestone status reports and deliveries/presentations on the system concept to colleagues, subordinates, and end user representatives. Provides daily supervision and direction to support staff.

**Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of eight years experience, of which at least five years must be specialized. Specialized experience includes: analysis and design of business applications

on complex systems for large-scale computers, data base management, use of the programming languages such as ADA, Cobol, 4GL, and DBMS. Knowledge of current storage and retrieval methods and demonstrated ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer programs. General experience includes increasing responsibilities in assignments of a technical nature. Proven ability to work independently or under only general direction on complex application problems involving all phases of systems analysis is required.

A Master of Sciences degree in Computer Science will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. degree in Computer Science will be considered equivalent to two years specialized experience and three years general experience.

### **3. Computer Systems Analyst**

### **ADP-III**

**Duties.** Analyzes and develops computer software possessing a wide range of capabilities, including numerous engineering, business, and records management functions. Develops plans for Automated Data Processing (ADP) systems from project inception to conclusion. Analyzes the problem and the information to be processed. Defines the problem, and develops system requirements and program specifications, from which programmers prepare detailed flow charts, programs, and tests. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions.

**Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least four years must be specialized. Specialized experience includes: analysis and design of business applications on complex systems for large-scale computers, including three years experience in data base management concepts, use of the programming languages such as ADA, COBOL, 4GL, and DBMS. Knowledge of current storage and retrieval methods, one year of systems analysis experience designing technical applications on computer systems and demonstrated ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer programs. General experience includes increasing responsibilities in information systems design and management. Must demonstrate the ability to work independently or under only general direction on requirements that are moderately complex to analyze, plan, program, and implement.

A Master of Sciences degree (in the fields described in this paragraph) will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. degree in Computer Science will be considered equivalent to two years specialized experience and three years general experience.



#### **4. Junior Computer Systems Analyst**

#### **ADP-III**

Duties. Develops requirements for information systems from a project's inception to conclusion. Develops required specifications for simple to moderately complex systems. Assists senior computer system analysts in preparing input and test data for the proposed system.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of four years experience, of which at least two years must be specialized. Specialized experience includes: two years analyzing and programming applications on large-scale computers with a minimum of one year of design and programming of moderately complex ADP systems. General experience includes increasing responsibilities in assignments of a technical nature. Typically required to work under close supervision and direction.

A Master of Sciences degree in Computer Science or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

#### **5. Applications Programmer**

#### **ADP-III**

Duties. Analyzes functional business applications and design specifications for functional areas such as payroll, logistics, and contracts. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to programmers as required to ensure program deadlines are met.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of five years experience, of which at least three years must be specialized. Specialized experience includes: experience as an applications programmer on large-scale data base management systems, knowledge of computer equipment and ability to develop complex software to satisfy design objectives. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.



## **6. System Programmer**

**ADP-III**

Duties. Create and/or maintain operating systems, communications software, data base packages, compilers, assemblers, and utility programs. Modify existing software, as well as, create special-purpose software to ensure efficiency and integrity between systems and applications.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of five years experience, of which at least three years must be specialized. Specialized experience includes: ADP systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **7. Senior Functional Analyst**

**ADP-III**

Duties. Analyze user needs to determine functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task. Provides daily supervision and direction to support staff.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of seven years experience, of which at least six years must be specialized. Specialized experience includes: developing functional requirements for complex integrated ADP systems. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **8. Functional Analyst**

**ADP-III**

Duties. Analyze user needs to determine functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires

a minimum of five years experience, of which at least three years must be specialized. Specialized experience includes: developing functional requirements for complex integrated ADP systems. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **9. Junior Functional Analyst**

**ADP-III**

Duties. Applies process improvement and re-engineering methodologies and principles to conduct process modernization projects. Develops functional area process and data models for use in designing and building integrated, shared software and database management systems.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of four years experience, of which at least two years must be specialized. Specialized experience includes developing functional requirements for complex integrated ADP systems. Typically required to work under close supervision and direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **10. Quality Assurance Manager (Key Personnel)**

**ADP-III**

Duties. Establishes and maintains a process for evaluating software and associated documentation. Determines the resources required for quality control. Maintains the level of quality throughout the software life cycle. Conducts formal and informal reviews at pre-determined points throughout the development life cycle.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least three years must be specialized. Specialized experience includes: Configuration Management, verification and validation, software testing and integration, software metrics and their application to software quality assessment. General experience includes increasing responsibilities in quality assurance and quality control.

A Master of Sciences degree in Computer Science, Information Systems, Engineering,

Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **11. Quality Assurance Analyst**

**ADP-III**

Duties. Assists in the evaluation of software and associated documentation. Participates in formal and informal reviews to determine quality.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of four years experience, of which at least two years must be specialized. Specialized experience includes: software testing and integration and demonstrated knowledge of system and project life cycles. General experience includes working with quality control methods and tools. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **12. Data Base Manager**

**ADP-III**

Duties. Manages the development of data base projects. Plans and budgets staff and data base resources. When necessary, reallocates resources to maximize benefits. Prepares and delivers presentations on Data Base Management Systems (DBMS) concepts. Provides daily supervision and direction to support staff.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of seven years experience, of which at least five years must be specialized. Specialized experience includes: demonstrated experience with data base management systems design and system analysis, current operating systems software internals and data manipulation languages. General experience includes increasing responsibilities in the development and maintenance of data base systems.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **13. Data Base Management Specialist**

**ADP-III**

Duties. Provides highly technical expertise in the use of DBMS. Evaluates and recommends available DBMS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications.

Qualifications. A Bachelor's degree in Computer Science, Information Systems,

Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least three years must be specialized.

Specialized experience includes: demonstrated experience using current DBMS technologies and other application design utilizing various data base management systems and experience with DBMS internals. General experience includes increasing responsibilities in DBMS systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

#### **14. System Administrator**

**ADP-III**

Duties. Supervises and manages the daily activities of configuration and operation of business systems. Optimize system operation and resource utilization, and performs system capacity analysis and planning. Provides assistance to users in accessing and using business systems.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of four years experience, of which at least three years must be specialized experience in administering UNIX or open systems-compliant systems.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

#### **15. Systems Operator**

**ADP-III**

Duties. Monitors and supports computer processing. Coordinates input, output, and file media. Distributes output and controls computer operation.

Qualifications. An Associates of Arts degree (in the fields described in this paragraph) is required. This position requires a minimum of three years experience, of which at least two years must be specialized experience operating a large-scale computer system. Must demonstrate sufficient knowledge of programming to understand how programs use computer hardware.

## **16. Senior Systems Engineer**

**ADP-III**

Duties. Analyzes information requirements. Evaluates analytically and systematically problems of workflows, organization, and planning and develops appropriate corrective action. Provides daily supervision and direction to staff.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least three years must be specialized.

Specialized experience includes: supervision of system engineers, and demonstrated use of interactive, interpretative systems with on-line, real-time acquisition capabilities. General experience includes increasing responsibilities in systems engineering.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. (in the fields described in this paragraph) will be considered equivalent to two years specialized experience and three years general experience.

## **17. Systems Engineer**

**ADP-III**

Duties. Analyzes information requirements. Evaluates analytically and systematically problems of workflows, organization, and planning and develops appropriate corrective action.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of three years experience, of which at least one year must be specialized.

Specialized experience includes: analytically solving problems of workflows, organization and planning. General experience includes increasing responsibilities in systems engineering.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **18. Senior Software Engineer**

**ADP-III**

Duties. Analyzes and studies complex system requirements. Designs software tools and subsystems to support software reuse and domain analyses and manages their implementation. Manages software development and support using formal specifications, data flow diagrams,

other accepted design techniques and Computer Aided Software Engineering (CASE) tools. Estimates software development costs and schedule. Reviews existing programs and assists in making refinements, reducing operating time, and improving current techniques. Supervises software configuration management.

**Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience managing or performing software engineering activities, of which at least three years must be specialized. Specialized experience includes: demonstrated experience working with Ada, SQL, and third/forth generation languages in the design and implementation of systems and using database management systems. General experience includes increasing responsibilities in software engineering activities. Must be familiar with applicable standards.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. (in the fields described in this paragraph) will be considered equivalent to two year specialized experience and three years general experience.

## **19.        *Software Engineer***

**ADP-III**

**Duties.** Designs software tools and subsystems to support software reuse and domain analysis. Interprets software requirements and design specifications to code, and integrates and tests software components.

**Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of three years experience as a software engineer; two years experience working with Ada, SQL, and third/forth generation languages in the design and implementation of systems and one year working with data base management systems.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience as a software engineer.

## **20.        *Senior Training Specialist***

**ADP-III**

**Duties.** Conducts the research necessary to develop and revise training courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals,

workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops, and seminars. Provides daily supervision and direction to staff.

**Qualifications.** A BA or BS degree in any field. This position requires a minimum of six years experience, of which at least three years must be specialized. Specialized experience includes: experience in developing and providing ADP and end-user training on computer hardware and application software. Demonstrated ability to communicate orally and in writing. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

A Ph.D. (in the fields described in this paragraph) will be considered equivalent to two year specialized experience and three years general experience.

## **21.        *Training Specialist***

### **ADP-III**

**Duties.** Conducts the research necessary to develop and revise training courses. Develops and revises these courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops and seminars.

**Qualifications.** A BA or BS degree in any field. This position requires a minimum of five years experience, of which at least two years must be specialized. Specialized experience includes: experience in developing and providing ADP and end-user training on computer hardware and application software. General experience includes information systems development, training, or related fields. Demonstrated ability to communicate orally and in writing.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.



## **22.        *Hardware Specialist***

## **ADP-II**

Duties. Reviews computer systems in term of machine capabilities and man-machine interface. Prepares reports and studies concerning hardware. Prepares functional requirements and specifications for hardware acquisitions. Ensures that problems have been properly identified and that the solutions will satisfy the user's requirements.

Qualifications. An Associates of Arts degree (in the fields described in this paragraph) is required. This position requires a minimum of seven years experience, of which at least three years must be specialized. Specialized experience includes: system analysis and evaluation of hardware capabilities and configurations. General experience includes increasing responsibilities and complexity in ADP systems, including systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

A Bachelor's degree (in the fields described in this paragraph) will be considered equivalent to one year specialized and three years general experience.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **23.        *Communications Hardware Specialist***

## **ADP-II**

Duties. Analyzes network and computer communications hardware characteristics and recommends equipment procurement, removals, and modifications. Adds, deletes, and modifies; as required, host, terminal, and network devices. Assists and coordinates with communications network specialists in the area of communications software. Analyzes and implements communications standards and protocols according to site requirements.

Qualifications. An Associates of Arts degree (in the fields described in this paragraph) is required. This position requires a minimum of seven years experience, of which at least three years must be specialized. Specialized experience includes: installing, testing, and operating network and computer (host) communications equipment (e.g., switches, modems, controllers, terminals, and multiplexers); using and implementing communications hardware and electrical standards, using communications hardware test and monitoring equipment and analyzing the results. General experience includes using and managing network and computer communications equipment. Must demonstrate the ability to work independently or under only general direction.

A Bachelor's degree (in the fields described in this paragraph) will be considered equivalent to one year specialized and three years general experience and

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **24.           Communications Software Specialist**

## **ADP-III**

Duties. Analyzes network and computer communications hardware characteristics and recommends equipment procurement, removals, and modifications. Adds, deletes, and modifies, as required, host, terminal, and network devices. Assists and coordinates with communications network specialists in the area of communications hardware.

Qualifications. A Bachelor's degree (in the fields described in this paragraph) is required. This position requires a minimum of seven years experience, of which at least three years must be specialized. Specialized experience includes: developing, testing, installing, and operating network and computer (host) communications software (e.g., access method and protocol software, application interfaces, transaction processors, and emulators); using and implementing communications standards. General experience includes all aspects of network and computer communications software. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## **25.           Communications Network Specialist**

## **ADP-III**

Duties. Analyzes network characteristics (e.g., traffic, connect time, transmission speeds, packet sizes, and throughput) and recommends procurement, removals, and modifications to network components. Designs and optimize network topologies and site configurations. Plans installations, transitions, and cutovers of network components and capabilities. Coordinates requirements with users and suppliers.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of seven years experience, of which at least three years must be specialized. Specialized experience includes: designing, testing, installing, implementing, and maintaining computer networks; using and implementing network standards, particularly those of the International Organization for Standardization (ISO); operating computer networks, particularly; identification and solution of problems, restart/recovery, additions, deletions, and modifications of terminals, hosts, etc., optimization of network costs and performance and implementing accounting and charge back systems. General experience includes all aspects of computer networks. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering,

Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

**26. Data Entry Clerk**

**ADP-II**

Duties. Performs data entry via on-line data terminal, key-to-tape, key-to-disk, or similar devices. Verifies data entered, where applicable.

Qualifications. Requires a high school diploma and one year experience in data entry and verification. Typically required to work under close supervision and direction.

An Associate of Arts (AA) degree in Computer Science or related study will be considered equivalent to one half (1/2) years of general experience. Formal specialized training may be substituted on the basis of one month of training for one month of experience, not to exceed three months.

**27. Operations Manager**

**ADP-II**

Duties. Manage computer operations. Schedule machine time and directs data entry efforts. Provides users with computer output.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least three years must be specialized. Specialized experience includes: supervision and operations experience on a large-scale computer system, knowledge of hardware, software and operating systems. General experience includes operations experience on a large-scale computer system.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

**28. Communications Network Manager**

**ADP-III**

Duties. Schedules conversions and cutovers. Oversees network control center. Supervises maintenance of systems. Coordinates with all responsible users and sites. Supervises staff.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least three years must be specialized. Specialized experience includes: supervising the operation and maintenance of

communications network systems. General experience includes all aspects of communications networks.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

**29. Senior Project Control Specialist (Key Personnel) ADP-III**

**Duties.** Directs all financial management and administrative activities, such as budgeting, manpower and resource planning, and financial reporting. May perform complex evaluations of existing procedures, processes, techniques, models, and/or systems related to management problems or contractual issues which would require a report and recommend solutions. Prepare charts, tables, graphs, and diagrams to assist in analyzing problems. Provides daily supervision and direction to staff.

**Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least three years must be specialized. Specialized experience includes: preparation and analysis of financial statements. General experience includes increasing responsibilities in general accounting or management activities. Must demonstrate the ability to work independently or under only general direction.

A Master of Business Administration or Graduate degree in a related study will be considered equivalent to one year specialized experience and two years general experience.

**30. Documentation Specialist ADP-I**

**Duties.** Gathers, analyzes, and composes technical information. Conducts research and ensures the use of proper technical terminology. Translates technical information into clear, readable documents to be used by technical and non-technical personnel.

**Qualifications.** An Associates of Arts degree (in the fields described in this paragraph) is required. This position requires a minimum of five years experience, of which at least two years must be specialized. Specialized experience includes: preparing technical documentation, which is to include researching for applicable standards. General experience includes technical writing and documentation experience pertaining to all aspects of ADP. Must demonstrate the ability to work independently or under only general direction.

A Bachelor's degree (in the fields described in this paragraph) will be considered equivalent to three years general experience.

**31.        *Technical Writer/Editor***

**ADP-I**

Duties. Assist in collecting and organizing information required for preparation of user manuals, training materials, installation guides, proposals, and reports. Edit functional descriptions, system specifications, user manuals, special reports, or any other customer deliverables and documents. Assists in performing financial and administrative functions.

Qualifications. A Bachelor's degree in English, Literature, or other related discipline applicable to this position. This position requires a minimum of three years experience, of which at least one year must be specialized. Specialized experience includes: demonstrated experience in editing documents, including technical documents. Must demonstrate the ability to work independently or under only general direction.

A Graduate degree in Literature or related study will be considered equivalent to one year specialized experience and two years general experience.

### **32. Senior Data Standardization Specialist**

**ADP-III**

Duties. Provides technical support in the evaluation of prime object names, data elements, and other objects. Evaluates proposed objects and their attributes. Ensures that proposed object definitions are clear, concise, technically correct, and that they represent singular concepts. Ensures that the proposed objects are consistent with data and process models. Provides daily supervision and direction to staff.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least two years must be specialized. Specialized experience includes: building and/or maintaining data/information repositories for organizations that use information engineering concepts and enterprise, data and process modeling in the identification and development of standardized objects. General experience includes technical writing, process and/or data modeling.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

### **33. Data Standardization Specialist**

**ADP-III**

Duties. Provides technical support in the evaluation of prime object names, data elements, and other objects. Evaluated proposed objects and their attributes. Ensures that proposed object definitions are clear, concise, technically correct, and that they represent singular concepts. Ensures that the values of object attributes and domain are accurate and correct. Ensures that the proposed objects are consistent with data and process models.

Qualifications. An Associates of Arts degree is required. This position requires a minimum of three years experience, of which at least one year must be specialized. Specialized experience includes: building and/or maintaining data/information repositories for organizations that use information engineering concepts and enterprise, data and process modeling in the identification and development of standardized objects. General experience includes technical writing and/or in process, or data modeling. Must demonstrate the ability to work independently or under only general direction.

A Bachelor's degree in Computer Science, Information Systems, Engineering or other related scientific or technical discipline will be considered equivalent to three years general experience.



**34.           Principal Information Engineer    (Key Personnel)           ADP-III**

Duties. Applies the concept of operations set of disciplines for the planning, analysis, design and construction of information systems across a major sector of the organization. Develops analytical and computational techniques and methodology for problem solutions. Performs strategic systems planning, business information planning, business and analysis. Performs process and data modeling in support of the planning and analysis efforts using both manual and automated tools; such as Integrated Computer-Aided Software Engineering (I-CASE) tools. Applies reverse engineering and re-engineering disciplines to develop strategic and planning documents. Provides technical guidance in software engineering techniques and automated support tools.

Qualifications. A Master of Sciences degree in Computer Science, Information Systems, Engineering, or other related scientific or technical discipline. This position requires ten years experience in information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. A minimum of five years experience is required in the following: demonstrated experience in managing the implementation of information engineering projects and experience in systems analysis, design and programming using CASE and IE tools and methods. Proven managerial and supervisory skills. Demonstrated exceptional written and oral communications skills, including giving formal presentations to different audiences. Must demonstrate the ability to work independently or under only general direction.

A Ph.D. in Computer Science, Information Systems, Engineering or other related scientific or technical discipline will be considered equivalent to two years specialized experience and three years general experience.

**35.           Senior Information Engineer    (Key Personnel)           ADP-III**

Duties. Applies business process improvement practices to re-engineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques. Assist in establishing standards for information systems procedures. Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems. Constructs sound, logical business improvement opportunities consistent with the CIM guiding principles, cost savings, and open system architecture objectives. Provides daily supervision and direction to staff.

Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of ten years experience, of which at least five years must be specialized in

information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. The following experience is also required: demonstrated experience in the implementation of information engineering projects; systems analysis, design and programming using CASE and IE tools and methods and three to five years of business or functional experience. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. degree (in the fields described in this paragraph) will be considered equivalent to two years specialized experience and three years general experience.

### **36. Information Engineer**

**ADP-III**

**Duties.** Applies business-wide disciplines for the planning, analysis, design and construction of information systems on an business-wide basis or across a major sector of the business. Performs business strategic systems planning, information planning, business and analysis. Performs process and data modeling in support of the planning and analysis efforts using both manual and automated tools; such as Integrated Computer-Aided Software Engineering (I-CASE) tools. Applies reverse engineering and re-engineering disciplines to develop migration strategic and planning documents. Provides technical guidance in software engineering techniques and automated support tools.

**Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of five years experience, of which at least two years must be specialized in information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. The following experience is also required: two years experience in the implementation of information engineering projects and experience in systems analysis; design and programming using CASE and IE tools and methods. Two years business/functional experience is desirable, to support the business modeling activities. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

### **37. Principal Open Systems Engineer (Key Personnel)**

**ADP-III**

Duties. Applies software, hardware, and standards information technology skills in the analysis, specification, development, integration, and acquisition of open systems for Information Management (IM) applications. Ensures these systems and applications are compliant with standards for open systems architectures, reference models, and profiles of standards - such as the IEEE Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of IM solutions on the application platform, across the application program interface (API), and the external environment/software application. Evaluates and recommends COTS applications and methodologies that can be acquired to provide interoperable, portable, and scalable information technology solutions. Performs analysis and validation of reusable software and hardware components to ensure the integration of these components into interoperable IM designs.

Qualifications. A Master of Sciences degree in Computer Science, Information Systems, Engineering, or other related scientific or technical discipline. This position requires a minimum of ten years experience in the information systems/software engineering field. Must have at least five years of specialized experience in the following technology/standard areas: POSIX, GOSIP, GUI, Ada, 4GL, CASE, object oriented technologies, OPENbus, DBMS, SQL, IRDS, ODA, CALS, EDI, simulation and modeling, automated systems security, software metrics/systems effectiveness measurement tools, multimedia applications, Online Transaction Processing (OLTP), distributed computing, and process/data/DISA modeling methods and tools. Must demonstrate experience in the analysis and validation of reusable software and hardware components.

A Ph.D. in Computer Science, Information Systems, Engineering or other related scientific or technical discipline will be considered equivalent to two years specialized experience and three years general experience.

### **38. Senior Open Systems Engineer**

### **ADP-III**

**Duties.** Applies software, hardware, and standards information technology skills in the analysis, specification, development, integration, and acquisition of open systems for Information Management (IM) applications. Ensures these systems and applications are compliant with standards for open systems architectures, reference models, and profiles of standards - such as the IEEE Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of IM solutions on the application platform, across the application program interface (API), and the external environment/software application. Evaluates and recommends COTS applications and methodologies that can be acquired to provide interoperable, portable, and scalable information technology solutions. Performs analysis and validation of reusable software and hardware components to ensure the integration of these components into interoperable IM designs. Provides daily supervision and direction to staff.

**Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering or other related scientific or technical discipline. This position requires a minimum of ten years experience in the information systems/software engineering field. Must have at least five years of specialized experience in the following technology/standard areas: POSIX, GOSIP, GUI, Ada, 4GL, CASE, object oriented technologies, OPENbus, DBMS, SQL, IRDS, ODA, CALS, EDI, simulation and modeling, automated systems security, software metrics/systems effectiveness measurement tools, multimedia applications, Online Transaction Processing (OLTP), distributed computing, and process/data/DISA modeling methods and tools. Must demonstrate experience in the analysis and validation of reusable software and hardware components.

A Master of Sciences degree in Computer Science, Information Systems, Engineering or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. (in the fields described in this paragraph) will be considered equivalent to two years specialized experience and three years general experience.

### **39. Open Systems Engineer**

### **ADP-III**

**Duties.** Applies software, hardware, and standards information technology skills in the analysis, specification, development, integration, and acquisition of open systems Information Management (IM) applications. Ensures these systems and applications are compliant with standards for open systems architectures, reference models, and profiles of standards - such as the IEEE Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of IM solutions on the application platform, across the application program interface (API), and the external environment/software application.

Evaluates and recommends COTS applications and methodologies that can be acquired to provide interoperable, portable, and scalable information technology solutions. Performs analysis and validation of reusable software and hardware components to ensure the integration of these components into interoperable IM designs.

**Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering or other related scientific or technical discipline. This position requires a minimum of five years experience in the information systems/software engineering field. Must have at least three years of specialized experience in the following technology/standard areas: POSIX, GOSIP, GUI, Ada, 4GL, CASE, object oriented technologies, OPENbus, DBMS, SQL, IRDS, ODA, CALS, EDI, simulation and modeling, automated systems security, software metrics/systems effectiveness measurement tools, multimedia applications, Online Transaction Processing (OLTP), distributed computing, and process/data/DISA modeling methods and tools. Must demonstrate experience in the analysis and validation of reusable software and hardware components. Must demonstrate the ability to work independently or under only general direction.

A Master of Sciences degree in Computer Science, Information Systems, Engineering or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

#### **40.        *Senior Computer Systems Security***

#### ***ADP-III***

**Duties.** Analyzes and defines security requirements for Multilevel Security (MLS) issues. Designs, develops, engineers, and implements solutions to MLS requirements. Responsible for the implementation of the MLS and the monitoring of this plan. Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs in the MLS arena. Performs risk analyses which also includes risk assessment. Provides daily supervision and direction to staff.

**Qualifications.** Must have a Bachelor's degree in Electrical Engineering, Information Science, Information Systems, Computer Science, Physics, Math, or other related scientific or technical discipline. This position requires a minimum of ten years experience, of which at least eight years must be specialized experience in defining computer security requirements for high level applications, evaluation of approved security product capabilities, and developing solutions to MLS problems.

A Master of Sciences degree in Electrical Engineering, Information Science, Information Systems, Computer Science, Physics, Math, or other related scientific or technical discipline will be considered equivalent to one year of specialized experience and two years general experience.

**41. Computer Systems Security Specialist**

**ADP-III**

Duties. Analyzes and defines security requirements for Multilevel Security (MLS) issues. Designs, develops, engineers, and implements solutions to MLS requirements. Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs in the MLS arena. Performs risk analyses which also includes risk assessment.

Qualifications. Must have a Bachelor's degree in Electrical Engineering, Information Science, Information Systems, Computer Science, Physics, Math, or other related scientific or technical discipline. This position requires a minimum of seven years experience, of which at least five years must be specialized experience in defining computer security requirements for high level applications, evaluation of approved security product capabilities, and developing solutions to MLS problems.

A Master of Sciences degree in Electrical Engineering, Information Science, Information Systems, Computer Science, Physics, Math, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. (in the fields described in this paragraph) will be considered equivalent to two years specialized experience and three years general experience.

**42. Graphics Specialist**

**ADP-I**

**Duties.** Shall support the development of all contract deliverables and reports by developing and updating graphics presentations to improve the quality and enhance the usability of these documents. Shall be responsible for integrating the graphics generated with automated tools and the deliverable documents.

**Qualifications.** Requires a high school degree and a minimum of two years experience in developing graphics/artistic presentations for publications and documents (preferably technical documentation). At minimum, one year of specialized experience using commercial automated word processing (e.g., WordPerfect, Word) and graphics (Harvard, Freelance, etc.) systems. Experience with desktop publishing systems is desirable. Must demonstrate the ability to work independently or under only general direction.

An Associate of Arts degree in Computer Science, Information or other related scientific or technical discipline will be considered equivalent to one year experience.

**43. Junior Systems Engineer**

**ADP-II**

**Duties.** Analyses information requirements. Evaluates analytically and systematically problems of workflows, organization, and planning and assists Senior Systems Engineers develop appropriate corrective action.

**Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position is for recent college graduates and requires no experience.

**44. Junior Software Engineer**

**ADP-II**

**Duties.** Participates in the design of the software tools and subsystems to support reuse and domain analysis. Assists Senior Software Engineers to interpret software requirements and design specifications to code, and integrate and test software components.

**Qualifications.** A Bachelor's degree in Computer science, Information Systems, Engineering Business, or other related scientific or technical discipline. The position is for recent college graduates and requires no experience

**45.         *Student System Engineering***

**ADP-II**

**Duties.** Assists with the analysis of information requirements. Aids in the evaluation of problems with workflow, organization and planning and helps develop appropriate corrective action.

**Qualifications.** Currently enrolled as a full-time student at a University or college and is majoring in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position is limited to part-time or summer-hire students.

**46.         *Senior Hardware Installation Technician***

**ADP-II**

**Duties.** For prototype programs, organizes and directs sites Surveys, Assesses and documents current site network configuration and user requirements. Designs and optimizes network topologies. Analyzes existing and develops new hardware requirements and prepares specifications for hardware acquisitions. Directs and leads preparation of engineering plans and site installation Technical Design Packages. Develops installation schedules. Mobilizes installation team. Directs and leads preparation of drawings documenting configuration changes at each site. Prepares site installation and test reports. Coordinates post installation operations and maintenance support.

**Qualifications.** Minimum education requirement is a high school diploma. This position requires a minimum of ten years experience of which at least five years must be specialized. Specialized experience includes, analysis, design, and installation of computer based systems. analysis, design, and installation of local area nets, and analysis and installation of communication system. General experience includes increasing responsibilities in technical management.

**47.         *Hardware Installation Technician***

**ADP-II**

**Duties.** For prototype programs, conducts site surveys, assesses and documents current site network configuration and user requirements. Designs and optimizes network topologies. Analyzes existing requirement and prepares specifications for hardware acquisitions. Prepares engineering plans and site installation technical design packages. Develops



installation schedules. Prepares drawings, documenting configuration changes at each site. Prepares site installation, test reports and builds specialized interconnecting cables. Configures computers, communications devices, and peripheral equipment. Installs network hardware. Trains site personnel in the proper use of hardware.

**Qualifications.** Minimum education requirement is a high school diploma. This position requires a minimum of five years experience of which at least three years must be specialized. Specialized experience includes, analysis and installation of computer based systems, analysis and installation of local area nets, fiber optic cable installation, specialized interconnect cable design and fabrication, and analysis and installation of communications systems. Proven ability to work independently or under only general direction.

**48.        *Hardware Draftsman***

**ADP-II**

**Duties.** Develops engineering drawings, using computer based drawing packages such as Aptitude. Develops engineering drawings for site plans, electrical interconnects and mechanical plans for specialized hardware.

**Qualifications.** Minimum education requirement is a high school diploma. This position requires a minimum of 7 years drafting experience. A diversified drafting background is required. A minimum of 4 years experience shall be in drafting of specialized interconnects drawings, site plans, and mechanical parts typical of custom hardware installations. Must demonstrate the ability to work independently or under only general supervision.

**49.        *Program Administration Specialist    (Key Personnel)***

**ADP-III**

A. **Duties.** Assists in the preparation of management plans and reports. Coordinates schedules to facilitate completion of proposals, contract deliverables, delivery order review, briefings/presentations, and IPR preparation. Performs analysis, development, and review of program administrative operating procedures.

B. **Qualifications.** Requires a Bachelor's degree in any field with a minimum of four years experience, of which at least two years must be specialized. Specialized experience in project development, and the expertise in the management and control of funds resources, and multi-task contracts.. Works

with limited supervision and direction. Required to use judgement and initiative in problem solving.

**50. *Project Manager*                      *(Key Personnel)*                      *ADP-III***

A. Duties. Serves as the project manager for a large, complex delivery order (or a group of delivery orders affecting the migration, legacy and/or the development of new systems). The Project Manager shall assist the program manager in working with the Government Contracting Officer (CO), the Contracting Officer's Representative (COR), the Contracting Officer's Technical Representative(s) (COTR(s)), government management personnel and customer agency representatives. Under the guidance of the Program Manager, the project manager is responsible for the overall management of the specific delivery order(s) and insuring that the technical solutions and schedules in the delivery order are implemented in a timely manner. Performs organizational wide integration planning and interfaces to other functional systems.

**B. Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least four years must be specialized. Specialized experience includes: complete engineering project development from inception to deployment, demonstrated ability to provide guidance and direction in tasks. The project manager requires the proven expertise in the management and control of funds and resources. They must demonstrate the capability in managing complex multi-task contracts.. General experience includes increasing responsibilities in information systems design and management.

1. With a Master's Degree (in the fields described in B above): five years of general experience of which at least three years specialized experience is required.
2. With a PhD (in the fields described in B above) four years of general experience of which at least two years specialized experience is required.

**51. Principal Systems Architect ADP-III**

**A. Duties.** Establishes system information requirements using analysis of the information engineer(s) in the development of organizational - wide or large scale information systems. Designs architecture to include the software, hardware, and communications to support the total requirements as well as provide for present and future cross-functional requirements and interfaces. Ensures these systems are compatible and in compliance with the standards for open systems architectures, the Open Systems Interconnection (OSI) and International Standards Organization (ISO) reference models, and profiles of standards - such as Institute of Electrical and Electronic Engineers (IEEE) Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of Information Management (IM)

solution of the application platform, across the application program interface (API), and the external environment/software application. Ensures that the common operating environment is TAFIM compliant. Evaluates analytically and systematically problems of work flows, organization, and planning and develops appropriate corrective action. Provides daily supervision and direction to staff.

**B. Qualifications.** A Master's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of ten years experience, of which at least seven years must be specialized. Specialized experience includes: supervision of system architects, use of structured analysis, design methodologies and design tools (such as IDEF1x, entity relationship diagrams, and other design techniques), object oriented principles, and experience with the logical and physical functional, operational, and technical architecture of large and complex information systems. General experience includes increasing responsibilities in systems engineering.

1. With a PhD (in the fields described in B above): eight years of general experience is required of which at least six year must be specialized experience.

## **52. Senior Systems Architect**

## **ADP-III**

**A. Duties.** Establishes system information requirements using analysis of the information engineer(s) in the development of enterprise-wide or large scale information systems. Designs architecture to include the software, hardware, and communications to support the total requirements as well as provide for present and future cross-functional requirements and interfaces. Ensures these systems are compatible and in compliance with the standards for open systems architectures, the Open Systems Interconnection (OSI) and International Standards Organization (ISO) reference models, and profiles of standards - such as Institute of Electrical and Electronic Engineers (IEEE) Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of Information Management (IM) solution of the application platform, across the application program interface (API), and the external environment/software application. Ensures that the common operating environment is TAFIM compliant. Evaluates analytically and systematically problems of work flows, organization, and planning and develops appropriate corrective action. Provides daily supervision and direction to staff.

**B. Qualifications.** Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of ten years experience, of which at least eight years must be specialized. Specialized experience includes: supervision of system architects, use of structured analysis, design methodologies and design tools (such as IDEF1x, entity relationship diagrams), and other design techniques, object oriented principles, and experience with the logical and physical functional, operational, and technical architecture of large and complex information systems.

1. With a Master's Degree (in the fields described in B above): eight years general experience of which at least six years must be specialized experience is required. With a PhD (in the fields described in B above) six years of general experience is required of which at least five year must be specialized experience.

**53. Senior Application Engineer**

**ADP-III**

A. Duties. Analyzes and studies complex system requirements. Designs software tools and subsystems to support software reuse and domain analyses and manages their implementation. Manages software development and support using formal specifications, data flow diagrams, other accepted design techniques and Computer Aided Software Engineering (CASE) tools. Estimates software development costs and schedule. Reviews existing programs and assists in making refinements, reducing operating time, and improving current techniques. Supervises software configuration management.

B. Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of ten years experience managing or performing software engineering activities, of which at least eight years must be specialized. Specialized experience includes: demonstrated experience working with Ada, SQL, and third/fourth generation languages in the design and implementation of systems and using database management systems. General experience includes increasing responsibilities in software engineering activities. Knowledgeable of applicable standards.

1. With a Master's Degree (in the fields described in B above): eight years general experience of which at least six years must be specialized experience is required.

**54. Applications Engineer**

**ADP-II**

A. Duties. Analyzes functional business applications and design specifications for functional activities. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to programmers to ensure program deadlines are met.

B. Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least four years must be specialized.

1. With a Master's Degree (in the fields described in B above): four years general experience of which at least three years must be specialized experience is required.

1. With a Master's Degree (in the fields described in B above): eight years general experience of which at least six years must be specialized experience is required.

**B. Qualifications.** Requires a Bachelor's degree in Business, Computer Science or Management or other related discipline. This position requires a minimum of four years general experience, of which at least two years must be specialized. Specialized experience in acquisition documentation, procedures, solicitations and contracts. Works with limited supervision and direction. Required to use judgement and initiative in problem solving.

**57. Contract Specialist**

**ADP-III**

A. Duties. Performs a full Range of PreAward and /or Post Award functions in the Acquisition of Services, Supplies, Equipment, Construction or ADP Contracting. Procures Major Items by use of Simplified Small Purchase. Sealed Bid and Formal Negotiated Contract Procedures. Solicits offers from contractors. Processes and Participates in the evaluation of the Bids and Proposals. Analyzes proposed prices and costs, as well as any technical issues. Meets with Contractor Representatives to discuss and develop contractual agreements. Prepares the Award documents. Processes Contract Termination for Default and No Cost Settlements on Termination for Convenience functions. Coordinates schedules to facilitate completion of proposals, contract deliverables, delivery order review, and IPR preparation.

B. Qualifications. Requires a Bachelor's degree in Computer Science, Business or other related discipline.

This position requires a minimum of four years of general experience of which at least two years must be specialized experience in contract administration.

**58.           Marketing Specialist**

**ADP-II**

A. Duties. Assists in the preparation of new customer development, customer account management, product and service reviews. Conducts market research for products, capabilities and customer satisfaction surveys. Prepares market analyses and strategies. Perform and Prepares Software Quality Assurance reviews, audits, presentations and briefings.

B. Qualifications. Requires a Bachelor's degree in Computer Science, Business or Marketing with a minimum of four years general experience, of which at least two years must be specialized. Specialized experience in customer integration (i.e Business, Marketing, Finance, Product and Personnel) issues. Required to use and provide judgment, initiative and direction in new customer development, account management and product and service review..

**59.           Senior Network Installation Technician**

**ADP-III**

A. Duties. Organizes and directs network installations on site surveys. Assesses and documents current site network configuration and user requirements. Designs and optimizes network topologies. Directs and leads preparation of engineering plans and site installation Technical Design Packages. Develops installation schedules. Mobilizes network installation team. Directs and leads preparation of drawings documenting configuration changes at each site. Prepares site installation and test reports. Coordinates post installation operations and maintenance support.

B. Qualifications. Minimum education requirement is a high school diploma. This position requires a minimum of ten years experience of which at least five years must be specialized. Specialized experience includes: supervision of installation technicians; analysis, design, and installation of local and wide area nets; and analysis and installation of communication systems. Familiar with engineering documentation, network configurations and topologies, X.25, TCP/IP, Frame Relay, Bridges, and Routers. General experience includes increasing responsibilities in technical management.

1. With an Associate's Degree: nine years general experience of which at least five years must be specialized experience is required.

2. With a Bachelor's Degree: eight years general experience of which at least four years must be specialized experience is required.

**60.           Network Installation Technician**

**ADP-III**

A. Duties. Conducts site Surveys. Assesses and documents current site network configuration and user requirements. Designs and optimizes network topologies. Follows engineering plans and site installation Technical Design Packages. Develops installation schedules. Works with network installation team. Assists in the preparation of drawing and documenting configuration changes at each site. Prepares site installation and test reports.

B. Qualifications. Minimum education requirement is a high school diploma. This position requires a minimum of five years experience of which at least three years must be specialized. Specialized experience includes: analysis, design, and installation of local area networks; and analysis and installation of communications systems. Specialized experience includes use of engineering documentation, network configurations and topologies, X.25, TCP/IP, Frame Relay, Bridges, and Routers. General experience includes increasing responsibilities in technical management.

1. With an Associate's Degree: four years general experience of which at least three years must be specialized experience is required.

2. With a Bachelor's Degree: three years general experience of which at least two years must be specialized experience is required.

#### **61. Network Draftsman**

**ADP-II**

A. Duties. Develops engineering drawings, using computer based drawing packages such as Aptitude. Develops engineering drawings for site plans, network configuration and design.

B. Qualifications. Minimum education requirement is a high school diploma. This position requires a minimum of 7 years drafting experience. Four years specialized experience shall be in drafting of specialized interconnects drawings, site plans, and mechanical parts typical of network installations. Must demonstrate the ability to work independently or under only general supervision.

1. With an Associate's Degree: six years general experience of which at least three years must be specialized experience is required.

2. With a Bachelor's Degree: five years general experience of which at least two years specialized experience is required.

#### **62. Communications Specialist**

**ADP-II**

A. Duties. Analyzes network characteristics (e.g., traffic, connect time, transmission speeds, packet sizes, and throughput) and recommends procurement, removals, and modifications to network components. Designs and optimizes network topologies and site configurations.



Plans installations, transitions, and cutovers of network components and capabilities.  
Coordinates requirements with users and suppliers.

B. Qualifications. A Bachelor's degree in Computer Science, Information Systems, Engineering, or other related fields. This position requires a minimum of six years experience, of which at least four years must be specialized experience in one of the following: communications software, communications hardware or network specialty. General experience includes all aspects of communication networks. Must demonstrate the ability to work independently or under only general direction.

Communications Hardware specialized experience includes: installing, testing, and operating network and computer (host) communications equipment (e.g., switches, modems, controllers, terminals, and multiplexers); using and implementing communications hardware and electrical standards, using communications hardware test and monitoring equipment and analyzing the results.

Communications Software specialized experience includes: developing, testing, installing, and operating network and computer (host) communications software (e.g. access method and protocol software, application interfaces, transaction processors, and emulators); using and implementing communications standards.

Network Specialty specialized experience includes: designing, testing, installing, implementing, and maintaining computer networks; using and implementing network standards, particularly those of the International Organization for Standardization (ISO); operating computer networks; identification and solution of problems, restart/recovery, additions, deletions, and modifications of terminals, hosts, etc., optimization of network costs and performance and implementing accounting and charge back systems.

1. With a Master's Degree (in the fields described in B above): five years general experience of which at least three years must be specialized experience is required.

### **63. *Principal Business Process Reengineering Specialist (Key Personnel) ADP-III***

**A. Duties. Applies process improvement and reengineering methodologies and principles to conduct process modernization projects. Responsible for effective transitioning of existing project teams, and the facilitation of project teams in the accomplishment of project activities and objectives. Provides group facilitation, interviewing, training, and provides additional forms of knowledge transfer. Key coordinator between multiple project teams to ensure enterprise-wide integration of reengineering efforts. Provides daily supervision and direction to Business Process Reengineering Specialist.**

**B. Qualifications. A Master's degree in Computer Science, Information Systems, Engineering, Business, Education, Management Sciences,**

Psychology, Human Resources Development/ Management, or other related scientific or technical discipline. This position requires a minimum of ten years experience, of which at least seven years must be specialized. Specialized experience may include: facilitation, training, methodology development and evaluation, process reengineering across all phases, identifying best practices, change management, business management techniques, organizational development, activity and data modeling, or information system development methods and practices and supervision of Business Process Reengineering Specialist.

1. With a PhD (in the fields described in B above): eight years general experience of which at least six years must be specialized experience is required.

**64.            *Sr. Business Process Reengineering Specialist*            ADP-III**

A. **Duties.** Applies process improvement and reengineering methodologies and principles to conduct process modernization projects. Duties include activity and data modeling, developing modern business methods, identifying best practices, and creating and assessing performance measurements. Provides group facilitation, interviewing, training, and provides additional forms of knowledge transfer. May be under the supervision and direction of a Senior Business Process Engineers or may work independently.

B. **Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, Education, Management Sciences, Psychology, Human Resources Development/ Management, or other related scientific or technical discipline. This position requires a minimum of ten years experience, of which at least eight years must be specialized. Specialized experience may include: facilitation, training, methodology development and evaluation, process reengineering across all phases, identifying best practices, change management, business management techniques, organizational development, activity and data modeling, or information system development methods and practices and supervision of Business Process Reengineers.

1. With a Master's Degree (in the fields described in B above): eight years general experience of which at least six years must be specialized experience is required. With a PhD (in the fields described in B above): six years general experience of which at least five years must be specialized experience is required.

## **65. Cost Analyst**

**ADP-II**

**A. Duties.** Performs Functional Economic Analysis (FEA) to evaluate the costs of alternative ways to accomplish functional objectives. The FEA states investment costs, benefits, and risks as a net change to the functional baseline cost, the cost of doing business now and in the future. Ensures that cross-functional, security, and other integration issues are addressed.

**B. Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, Accounting, or other related scientific or technical discipline. This position requires a minimum of six years experience, of which at least four years must be specialized. Specialized experience includes: demonstrated experience in providing technical and financial justifications (obtained by collecting information relevant to the decision and displaying that information in standard formats) in support of computer system selections. General experience includes increasing responsibilities in information systems of a technical and fiscal nature.

**1. With a Master's Degree (in the fields described in B above):** five years general experience of which at least three years must be specialized experience is required.

## **66. Senior Business Planning and Management Specialist**

**ADP-III**

**A. Duties.** Applies Strategic and Business Planning methodologies, processes and principles to develop organizational strategic, tactical and operational business plans based on best industry practices. Duties include environmental analysis, best practices identification, strategy and goal formulation, resource analysis, strategy evaluation and control. Responsible for identification of interfaces to other control systems such as budgeting, financial, information, and performance systems. Provides facilitation and training of leadership and management groups in strategic thinking, business planning, execution, and control.

**B. Qualifications.** . A Bachelor's degree (in the fields described in this paragraph) will be considered with twelve years experience of which at least ten years must be specialized

**1. A Master's degree in Business or Management Sciences or other related scientific, technical or business discipline.** This position requires a minimum of ten years experience, of which at least seven years must be specialized.

**67. Senior Performance Measurement Specialist**

**ADP-III**

**A. Duties:** Applies state-of-the-art performance measurement techniques to develop performance plans and performance measurements linked to strategic and operational business plans. Responsible for developing a performance measurement system including accountability matrices, criteria for performance measures, and performance system implementation guidelines with emphasis on the Government Performance and Results Act (GPRA) requirements. Provides facilitation and training of management and leadership groups in formulating and/or refining performance indicators for business goals and objectives related to an information technology services business. Duties include defining key results of program mission and developing indicators and measurements to manage the business processes to achieve program results.

**B. Qualifications.** A Master's degree in Business or Management Sciences, Industrial Engineering and Management, Information Systems, or other related discipline. This position requires a minimum of ten years experience, of which at least eight must be specialized. Specialized experience may include strategic and business planning, operational planning and control, business process reengineering, program evaluation, and performance systems.

**68. Senior Organizational Development Specialist**

**ADP-III**

**A. Duties:** Responsible for organizational planning and systems development for achieving optimal use of the organization's human assets. Responsible for using state-of-the-art organizational development techniques in designing organizational structures, management systems, and performance evaluation systems. Assists management in diagnosing organizational or system problems and implementing plans for problem resolution and performance improvement. Duties include assessing the effectiveness of designated corporatewide or divisional programs with respect to their stated goals and objectives. Identifies and develops plans for increasing management effectiveness and improving work relationships.

**B. Qualifications:** A Master's Degree in Organizational Development, Human Resource Development/Management, or other related discipline. This position requires a minimum of ten years experience, of which at least eight must be specialized. Specialized experience may include organizational development, organizational analysis and planning, management and performance system design and evaluation, and organizational redesign and reengineering.

## **69. Senior Training Needs Analyst**

**ADP-III**

**A. Duties:** Applies state-of-the-art needs analysis techniques to business processes in which the organization must maintain or develop competence. Responsible for developing profiles of the knowledge and skills needed to perform these business functions. Duties include using strategic and business plans to identify future knowledge and skill needs; analyzing anticipated changes in processes or technologies to determine implications for future knowledge and skill requirements, defining current knowledge and skill needs, identifying gaps between current and future knowledge and skill needs, defining individual competencies required to sustain and/or redirect the organization's competencies, and advising on training program(s) required to sustain and/or redirect the organization's competencies.

**B. Qualifications:** A Master's Degree in Human Resources Development/Management, Instructional Design, Education, or other related discipline. This position requires a minimum of ten years experience, of which at least eight must be specialized. Specialized experience may include needs assessment, knowledge and skills analysis, instructional systems design, training program design, training development and evaluation, bench marking, organizational development, organizational competency development, and workforce planning.

## **70. Training Needs Analyst**

**ADP-II**

**A. Duties:** Applies state-of-the-art needs analysis techniques to business processes in which the organization must maintain or develop competence. Duties include developing plans for the long-term development of each competency needed by the organization, defining organizational standards for the quality of training and development activities required to sustain and/or redirect the organization's competencies, mapping organizational competencies to constituent individual competencies and defining processes for developing and maintaining individual development plans.

**B. Qualifications:** A Bachelor's Degree in Human Resources Development/Management, Instructional Design, Education, or other related discipline. This position requires a minimum of ten years experience, of which at least six must be specialized. Specialized experience may include needs assessment, knowledge and skills analysis, instructional systems design, training program design, training development and evaluation, bench marking, organizational development, organizational competency

development, and workforce planning.

#### **71. Statistician**

**ADP-II**

**A. Duties:** Responsible for the selection, adoption and use of proper statistical methods of analysis and presentation appropriate to a business problem. Duties include collecting, compiling, describing, organizing, analyzing, interpreting and presenting information in numerical form. Uses or recommends ways of using statistical techniques in the solution of specific business problems requiring quantitative data. Evaluates data quality, and advises on ways to improve data quality and ensure data integrity. Advises on the selection, adaptation and use of standard statistical techniques to specific business processes/situations, including advising on the relevant statistical theories, assumptions and principles. Recommends new and improved methods for obtaining data.

**B. Qualifications:** A Bachelor's Degree in Statistics, Mathematics or other related scientific discipline. This position requires a minimum of eight years experience, of which at least six must be specialized. This position also requires knowledge of and skill in using commonly -used software statistical analyses packages such as SAS and SPSS. Specialized experience may include statistical work in the fields of economics, education , engineering, demography operations and administration and insurance.

#### **72. Audio Visual Expert**

**ADP-I**

**A. Duties:** Works with requesters and subject matter experts; develops scripts and storyboards to accompany audiovisual productions. As required by the project, conducts in-depth research into and decisions regarding the subject-matter to be depicted from broad concepts presented by the customer. Develops and coordinates scripts, makes revisions to scripts as a result of coordination with customer. The work requires translating subject matter ideas and information into visual products involving decisions on what aspects of the subject matter will be depicted and emphasized as well as how each will be depicted. Because much of the incumbent's work is "the first time", the employee plays a major role in transforming ideas and information into a visual product. Schedules and conducts pre-production planning conferences, as appropriate, with project managers, Executive Directors, Command, subject matter experts, and personnel from other agencies. As applicable, provides alternatives/options on state-of-the-art techniques and processes available to represent information in video presentations. As required, persuades program managers, etc., in the use

of more effective techniques and processes, some of which are novel or unique to the organization.

**B. Qualifications:** Bachelor's degree in Broadcast Communications, Communications, Film and Television or other related arts or communications disciplines. This position requires a minimum of ten years experience, of which at least six years must be specialized. Specialized experience includes: audio and visual production (inception to delivery), scripting, directing, set management, proven expertise in the management and control of funds and resources, demonstrated capability in managing multi-task contracts of this type and complexity. General experience includes increasing responsibilities in audio visual production design and management.

**A Master of Sciences degree in Broadcast Communications, Communications, Film and Television or other related arts or communications discipline will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. (in the fields described in this paragraph) will be considered equivalent to two years specialized experience and three years general experience.**

### **73. Multi Media Specialist**

**ADP-I**

#### **DUTIES:**

**A. Duties: Professional knowledge of a wide range of concepts, principles, and practices for communicating information through multi-media means and the ability to apply this knowledge to all phases of audiovisual production, programming, and editing to complete video productions to be used for information, education, and training related to the mission accomplishment. The incumbent applies knowledge of multi-media production to a wide range of audiovisual production techniques in rehearsing and directing the actions of casts and composing programs with multiple visual or audio elements and other complicating features. The incumbent is responsible for providing multi-media services to include video and audio recording, television production, computer graphics integration and maintenance of an audiovisual library operation in support of customers. Included in the multi-media presentations are representations of actual events, dialogue, narration, sound effects, music and animation. Uses a personal computer and a variety of software packages for graphics, animation, PC based editing, interactive video and related state-of-the-art technology applicable to a wide variety of projects.**

#### **QUALIFICATION:**

**B. Qualifications: A Bachelor's degree in Broadcast Communications, Communications, Film and Television or other related arts or communications disciplines. This position requires a minimum of ten years experience, of which at least six years must be specialized. Specialized experience includes: multi media production (inception to delivery), computer graphics scripting, computer editing, computer integration into audio/visual production and demonstrated ability to provide guidance and direction in the tasks similar to the sample tasks provided in the statement of work, proven expertise in the management and control of funds and resources, demonstrated capability in managing multi-task contracts of this type and complexity. General experience includes increasing**



responsibilities in multi media production design and management.

A Master of Sciences degree in Broadcast Communications, Communications, Film and Television or other related arts or communications discipline will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. (in the fields described in this paragraph) will be considered equivalent to two years specialized experience and three years general experience.

**74.        *Senior Applications/Computer Systems Test Manager    ADP-III***

**A. Duties.** Provides technical and administrative direction for personnel performing software test and evaluation tasks, including the review of work products for correctness, adherence to the design concept and to user standards, and for progress in accordance with schedules. Coordinates with the Program Manager and other team members to ensure problem solution, appropriate risk reduction, and user satisfaction. Makes recommendations, if needed, on test and evaluation strategies for major systems installations. Estimates software testing costs and schedule. Prepares milestone status reports and deliveries/presentations on the system test and evaluation concept to colleagues, subordinates, and end user representatives. Provides direction to test and evaluation support staff.

**B. Qualifications.** A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. This position requires a minimum of eight years experience, of which at least five years must be specialized. Specialized experience includes: test and evaluation of business applications on complex systems for large-scale computers, data base management, use of the programming languages such as ADA, COBOL, 4GL, and DBMS. Knowledge of current storage and retrieval methods and demonstrated ability to formulate test plans and procedures for customer agency representatives and computer programmers to use in testing and evaluation of computer programs. General experience includes increasing responsibilities in assignments of a technical nature. Proven ability to work independently or under only general direction on complex application problems involving all phases of systems testing and evaluation is required.

A Master of Sciences degree in Computer Science will be considered equivalent to one year specialized experience and two years general experience. A Ph.D. degree in Computer Science will be considered equivalent to two years specialized experience and three years general experience.

**75. Clerical Assistant**

**ADP-III**

**A. Duties.** Performs office clerical duties including a variety of support tasks requiring the collecting, compiling, evaluating and publishing of information and statistical data included in documents, records, forms, reports, plans, policies and regulations. Needs typist and general office skills to consolidate information regarding project status and other documents.. Needs knowledge of office automation systems using several types of software for various office needs. Utilizes Personal Computers and packaged software, including spreadsheet, DBMS, Word Processing and graphics to produce reports or briefings. Maintains correspondence suspense files, records, files for reports, operating procedures, internal memorandums, and composes correspondence.

**B. Qualifications.** Requires a high school diploma and one year experience in data entry and verification. Typically required to work under close supervision and direction.

An Associate of Arts (AA) degree in Computer Science or related study will be considered equivalent to one half (1/2) years of general experience. Formal specialized training may be substituted on the basis of one month of training for one month of experience, not to exceed three months.

## **ATTACHMENT C**

**AUTOMATED INFORMATION SYSTEMS (AIS) EXPERIENCE:**